CLAIMS

We claim:

1. A method for safely accessing shared storage media in a computing environment having two or more nodes comprising:
   (a) establishing access rights of at least two of said nodes to said storage media, said establishing access rights being responsive at least in part to a hard attribute of associated storage media; and
   (b) accessing said storage media by one of said at least two of said nodes in response to said access rights.

2. The method of claim 1, wherein said hard attribute comprises a hardware identifier field, including a vendor, product, and a serial number of said storage media.

3. The method of claim 1, wherein said establishing access rights creates a label including said hard attribute, a type field, and a node identifier field.

4. The method of claim 3, further comprising the step of allowing access of a node to said storage media if said type field indicates said storage media is node-owned and said node identifier matches a node identifier of said node.

5. The method of claim 3, wherein said label further includes:
a cluster identifier field; and
further comprising the step of allowing access of a node in a cluster to said storage media if said type field indicates said storage media is cluster-owned and said cluster identifier matches a cluster identifier of said node.

6. The method of claim 3, wherein said label further includes an activity interval field and an activity counter field for protecting ownership of said storage media.

7. The method of claim 1, wherein the computing environment is a storage area network.

8. A computing environment comprising:
two or more nodes ;
shared storage media;
associated storage media having a hard attribute; and
an access manager for each of at least two of said nodes, said manager being responsive at least in part to said hard attribute.

9. The system of claim 8, wherein said hard attribute comprises a hardware identifier field, including a vendor, a product, and a serial number of said storage media.

10. The system of claim 8, wherein said access manager is responsive at least in part to a label, said label including said hard attribute, a type field, and a node identifier field.

11. The system of claim 10, further comprising a positive access response from said access manager if said type field indicates said media is node-owned and said node identifier field matches a node identifier of said node.

12. The system of claim 10, wherein said label further includes a cluster identifier field; and further comprising a positive access response from said access manager if said type field indicates said media is cluster-owned and said cluster identifier matches a cluster identifier of said node.

13. The system of claim 10, wherein said label further comprises an activity data field and an activity counter field to protect ownership of said media.

14. An article comprising:

a computer-readable signal-bearing medium;

means in the medium for accessing shared storage media, said storage media having associated storage media having a hard attribute;

means in the medium for establishing access rights of at least two nodes to said storage media at least in part in response to said hard attribute; and

means in the medium for managing an access request to said storage media in response to said access rights.

15. The article of claim 14, wherein the medium is selected from the group consisting of: a recordable data storage medium and a modulated carrier signal.

16. The article of claim 14, wherein said managing means grants a positive access request to a node responsive to confirmation of node ownership of said media.

17. The article of claim 14, wherein said managing means grants a positive access request to a node in a cluster responsive to confirmation of cluster ownership of said media.

18. A method for safely accessing shared storage media in a computing environment having two or more nodes comprising:

(a) writing a label, said label being determined at least in part by a hardware identifier of associated storage media of said storage media, said hardware identifier including a serial number of said storage media;

(b) establishing access rights of a node to said storage media responsive to said label; and

(c) determining a node's responsibility for coordinating access to said storage media responsive to said label.

19. The method of claim 18, further comprising the step of allowing access of a node to said storage media if a type field in said label indicates said storage media is node-owned and a node identifier in said label matches a node identifier of said node.

20. The method of claim 18, further comprising the step of allowing access of a node in a cluster to said media if a type field in said label indicates said storage media is cluster-owned and a cluster identifier in said label matches a cluster identifier of said node.